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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/492,787	01/28/2000	Kenji Funamoto	0879-0250P	1370

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EXAMINER

VILLECCO, JOHN M

ART UNIT	PAPER NUMBER
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2612

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DATE MAILED: 11/07/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/492,787

Applicant(s)

FUNAMOTO, KENJI

Examiner

John M. Villecco

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 January 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. **Claims 1, 3, and 5 are rejected under 35 U.S.C. 102(e) as being anticipated by Tanaka et al. (U.S. Patent No. 6,130,420).**

3. Regarding *claim 1*, Tanaka discloses a frequency divider (23) for dividing a frequency of a drive clock (22) of an imaging device (10), an A/D converter (103) for converting an image signal from the imager (10) according to the timing generating circuit (20) which includes the drive clock (22), and a signal processor (104) for processing the image data output from the A/D converter (103). See Figures 1 and 7. Furthermore, the signal processor (104) captures the images in synchronization with the frequency divided clock since the pixels are continually read to the signal processor (104) based on the output of the timing generator (20). Additionally, Tanaka discloses in Figure 7, providing a signal to the camera signal processing circuit, thus controlling its timing.
4. As for *claim 3*, in column 4, line 62, Tanaka discloses that frequency is divided by a factor of m, where m is a natural number. It is well known in the art the natural numbers include odd numbers.

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5. With regard to *claim 5*, Tanaka discloses an LCD (107) for displaying the image output from the signal processor (104).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. **Claims 2 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tanaka et al. (U.S. Patent No. 6,130,420).**

8. Regarding *claim 2*, as mentioned above in the discussion of claim 1, Tanaka discloses all of the limitation of the parent claim. However Tanaka fails to explicitly state that the pixels of the CCD are arranged in a G-stripe or Bayer arrangement. However, Official Notice is taken as to the fact that it is well known in the art to use a G-stripe or Bayer arrangement on a color imaging device. It is well known that these types of filter arrangement provide for excellent color reproducibility. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a G-stripe or Bayer filter arrangement in the imager of Tanaka so that excellent color reproducibility is attained.

9. As for *claim 4*, in column 4, line 62, Tanaka discloses that frequency is divided by a factor of m, where m is a natural number. It is well known in the art the natural numbers include odd numbers.

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10. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sakai (U.S. Patent No. 5,206,730).

11. With regard to *claim 6*, Sakai discloses a CCD sensor (2), a timing generator (1) that generates a drive clock for the CCD sensor, a frequency divider (8) that divides a frequency of the drive clock (1), an A/D converter (3) which operates according to the drive clock (1), a selection device (9) that outputs one of the drive signal of the frequency divided clock signal, a signal processor (5) for processing image data from the A/D converter that operates in synchronization with the one of the drive clock or the frequency divided clock signal, and a memory (7) that records image data output from the image processor (5). The system also includes a release switch (12) for starting a photographing operation.

Sakai, however, fails to explicitly state the use of a display for displaying image data. In order to cover this limitation Official Notice is taken as to the fact that it is well known in the art to include a display in a camera for viewing images processed by an image processor. By providing a display in a camera the user is given the ability to quickly review and confirm the images which he/she has just captured. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include a display in the camera of Sakai so that a user may quickly review and confirm the acquired images.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

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(703) 872-9306 (For either formal or informal communications intended for entry. For informal or draft communications, please label **"PROPOSED"** or **"DRAFT"**)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington VA, Sixth Floor (Receptionist).


Any inquiry concerning this communication or earlier communications from the examiner should be directed to John M. Villecco whose telephone number is (703) 305-1460. The examiner can normally be reached on Monday through Thursday from 7:00 am to 5:30 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wendy Garber, can be reached on (703) 305-4929. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the customer service desk whose telephone number is (703) 306-0377.



JMV
10/22/03



WENDY R. GARBER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600